Region 1 FY 2014 Invasive Species Control Program Proposal

Refuge/complex name: McNary National Wildlife Refuge (Mid-Columbia River NWR Complex)

Project title: Control of Camelthorn on McNary Refuge

Total amount requested: $27,000

Project description:

Target Invasive Species: Camelthorn (*Alhagi maurorum*)
Infested Acres: ~ 350-400 acres
Treatment Acres: 300 acres

Camelthorn is a highly aggressive, deep-rooted, rhizomatous woody shrub that can invade and displace intact native habitats. It has little to no forage or cover value and once fully established can form near monocultures, severely degrading habitat values. Owing to its rhizomatous nature, it can be stimulated by both fire and mowing. Unfortunately, camelthorn first invaded in areas that were routinely managed for waterfowl forage using both of these methods, which are no longer used in these areas. Currently, camelthorn is known to infest approx. 300 acres within the Fee Hunt and Peninsula Units (upstream areas), and is believed to infest up to 100 acres in the Two Rivers Unit; this last (downstream) area is targeted for mapping this year. Camelthorn is a Class "B" noxious weed in Washington State.

The Complex has been informally experimenting during the last few years with different chemicals for control of camelthorn. Anecdotal evidence shows aminopyralid mixed with triclopyr works well to control camelthorn with one application, without removing grasses. The proposed project will cover chemical and other expenses to chemically control camelthorn in the Fee Hunt and Peninsula Units.

Distinct project with well-defined objectives (10 points):
The initial treatment of camelthorn is currently beyond what the Complex can cover under base budgeting. Successful treatment of camelthorn infestations will not only reduce the infestations to an annually manageable level but may serve as demonstrations to foment partnerships to continue and expand control efforts (e.g., with rail lines, irrigation districts).

Potential for maximum control/Likelihood of success (10 points):
Anecdotal evidence from past chemical control efforts by the Complex on outlier infestations has shown good control (>95%) or eradication using clopyralid and aminopyralid + triclopyr. This last combination does not have the soil movement issues of clopyralid and as such is better suited to the proposed project. Follow-up treatments will likely be necessary to pick up skips and surviving plants. Additionally, once the mapping is completed in 2014 the Two Rivers Unit would also be targeted for future efforts.

Biological benefit to priority species or BIDEH (10 points):
Left unchecked, camelthorn can form low- to no-habitat value monotypic stands at the expense of native habitats. The bulk of the invaded habitats are managed as feeding and cover habitats for waterfowl and other migratory birds. Camelthorn precludes effective management of habitat for these species.

Sustainability (10 points):
Once reduced in area, control of the camelthorn infestations will easily be maintained during routine, annual invasives treatments undertaken by the Complex. Further, the reduction can be used to help stimulate partnerships to continue and expand control. However, all proposed activities should be accomplished within the current fiscal year.

Comment [BF1]: Vague and evasive

Monitoring to document and evaluate project success (10 points):
The camelthorn infestations within the Fee Hunt and Peninsula Units have been mapped using hand-held GPS units; mapping of the Two Rivers should be completed this year. Treatment documentation will rely heavily on maps generated from this collected data. Monitoring will consist of visual observation of treated areas and establishment of photopoints. Treated sites will be revisited in subsequent years and retreatments will be made as needed.

Budget: $27,000

Personnel: $11,500
Travel: $2,100
Materials/Equipment: $13,400

The Complex will be forming another Invasives Strike Team for 2014 to target other projects on the Complex. The requested personnel funds will support both Complex personnel and will allow for targeting of the proposed infestation by the Strike Team by offsetting costs and increasing flexibility of the multi-year NFWF funds. The travel expenses will cover fuel and vehicle costs. The strike team is to be based out of the Burbank office. The McNary infestation sites are approx. 40 miles round-trip from the Burbank office. The materials and equipment funds will predominately cover chemical costs and spray-equipment expenses, including basic repairs.

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